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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/978,027	10/17/2001	Guenaelle Martin	214862US0	3816

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EXAMINER

YU, GINA C

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 04/09/2003

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/978,027

Applicant(s)

MARTIN ET AL.

Examiner

Gina C. Yu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Receipt is acknowledged of Amendment filed on January 14, 2003. Claims 1-14 are pending. Claim rejection under 35 U.S.C. § 112, first paragraph are withdrawn in view of applicants' amendment. Claim rejection under § 112, second paragraph are withdrawn in view of applicants' amendment. Claim rejections under § 103 have been modified to meet new claim, but otherwise maintained for the reasons of record.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 1-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanner (US 5827508).

Tanner teaches a composition comprising dibenzoylmethane sunscreen compound and surface-treated zinc oxide with chemical, physical, and photostability. See abstract. The reference also teaches that vitamins such as retinol can be used. See col. 15, lines 7-11. Tanner teaches benzophenone derivatives such as esters of 2-hydroxy-4(2-hydroxyethoxy) benzophenone and 4-N,N(2-ethylhexyl)methylaminobenzoic acid. See col. 6, lines 2-6. See instant claim 9. Oil-in-water emulsions are taught in col. 8, lines 57-60. See instant claim 5. Additional sunscreen agents are taught in col. 9, line 45 – col. 10, line 7, which include octyl salicylate, homomenthyl salicylate, 2-ethylhexyl-p-methoxycinnamate. See instant claims 7 and 8. The reference also teaches benzene-1,4-[bis(3-methylidenecamphormethylsulphonic)] acid. See instant claim 2. Topical application to

the skin is disclosed at col. 3, lines 15-18. See also col. 1, line 16 – col. 2, line 46 for the teaching that long term effect of UV exposure to skin includes premature aging of the skin. See instant claim 14.

Tanner does not disclose a specific formulation comprising a compound of instant formula (I) in combination with retinol or the amount thereof; or other UVB; UVA; and inorganic pigment.

Tanner teaches that the invention can contain all of the recited components in the instant claims. It is within the skill in the art to select optimal parameters in a composition in order to achieve a beneficial effect. See In re Boesch, 205 U.S.P.Q. 215 (CCPA 109). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have for one skilled artisan to vary the proportions of components in a composition to arrive at the best compositions for the intended purposes. "It is not inventive to discover the optimum or workable ranges by routine experimentation." See In re Aller, F.2d 454, 456, 105 U.S.P.Q. 233, 235 (C.C.P.A. 1955). Only if the "results optimizing a variable" are "unexpectedly good" can a patent be obtained for the claimed critical range. See In re Antonie, 559 F.2d 618, 620, 195 U.S.P.Q. 6, 8 (C.C.P.A. 1977); see also In re Dillon 919 F.2d 688, 692, 16 U.S.P.Q. 2d 1897, 1901 (Fed. Cir. 1990) (in banc). It is prima facie obvious to combine two compositions each of which is taught by the prior art to be used for the very same purpose. See In re Kerkoven, 626 F.2d 846, 850, 205 U.S.P.Q. 1069, 1072 (C.C.P.A. 1980). The idea of combining them flows logically from their having been individually taught in the prior art. See In re Crockett, 279 F.2d 274, 276-77, 126 U.S.P.Q. 186, 188

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(C.C. P.A. 1960). Therefore, absent evidence of unexpected results the particular combination and concentration of components is not given patentable weight over the prior arts.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared the composition of Tanner using any suitable combination of disclosed sunscreen agents and other active agents in optimal concentrations expecting to obtain a composition that provides protection to the skin from ultraviolet radiation that exhibits improved chemical, physical and photostability.

2. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanner as applied to claims 1-9 and 11-14 above, and further in view of Siddiqui (US 6015548).

Tanner fails to teach the UVA sunscreen agents of instant claim 10.

Siddiqui teaches that UVA sunscreen agents such as benzophenone-3 exhibit a synergistic effect of superior protection to the skin from ultraviolet radiation when combined with an antioxidant such as vitamin A (retinol). See the abstract; col. 7, lines 57-59.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added benzophenone-3 as taught by Siddiqui to the composition of Tanner because of the expectation of successfully obtaining superior protection to the skin from ultraviolet radiation.

Response to Arguments

Applicant's arguments filed January 14, 2003 have been fully considered but they are not persuasive.

Applicants argue that Tanner the addition of retinol to the composition is taught as only an option. Applicants further assert that such teaching does not provide motivation to specifically select retinol among the numerous additives also disclosed in the reference. Examiner respectfully disagrees. It is true that Tanner teaches various cosmetic ingredients suitable to incorporate in the sunscreen composition. Examiner notes however that the reference in fact teaches that these additives such as retinol are specific functional ingredients well known in cosmetic art. See col. 14, lines 54 – 61. The Tanner reference goes on to specifically teach that vitamin A and E and derivatives can be used. See col. 15, lines 7 – 11. The motivation to add vitamins to the sunscreen composition is certainly found within the reference. Examiner asserts that the obviousness rejection over Tanner is proper since the reference clearly teaches that the Tanner composition “demonstrate unexpected photostability, chemical stability, and physical stability”, provides good UVA protection, and that the surface treatment of the zinc oxide renders the zinc oxide “less reactive to the dibenzoylmethane derivative and the other components in the composition, thereby resulting in less chemical and physical degradation of the composition.” See col. 2, lines 18 – 27. Thus, a skilled artisan would have expected that, based on the disclosure of the Tanner reference, that the additional components present in the composition such as retinol would be “less reactive to the composition,” and remain more chemically and physically stable in the composition.

Applicants further argues that a skilled artisan would have had no motivation to incorporate retinol in a composition that may comprise Parasol 1789 because of the alleged decomposition of retinol. While applicants argue that applicants' selection of the sunscreens agents disclosed in Tanner produces a superior results than Parasol 1789, applicants are claiming a composition comprising the genus of Parasol 1789, a benzophenone derivative, in the composition. See instant claim 9.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gina C. Yu whose telephone number is 703-308-3951.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan can be reached on 703-305-1877. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

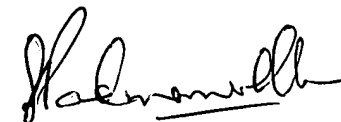
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308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1234.

Gina C. Yu
Patent Examiner
April 2, 2003



SREENI PADMANABHAN
PRIMARY EXAMINER

4/7/03